

AMENDMENTS TO THE CLAIMS

Claims 1-30 (CANCELLED)

31. (NEW) A method for treating or preventing a disease caused by an agent possessing at least one accessible sulphate and/or at least one accessible phosphate group comprising administering to a patient in which thereof a therapeutically effective amount of a polypeptide comprising the sequence of SEQ ID NO:1, or a functional fragment or derivative thereof, or of a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional fragment or derivative thereof.

32. (NEW) The method according to claim 31, wherein the agent is a microorganism.

33. (NEW) The method according to claim 32, wherein the microorganism is a bacterium or a virus, the bacteria including the genera Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella and Bacillus.

34. (NEW) The method according to claim 31, wherein the agent is a non-living compound or composition.

35. (NEW) The method according to claim 34, wherein the non-living compound or composition is selected from the group consisting of DSS, sulphated carbohydrates, preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate,

phosphate group exposing compounds or compositions, preferably DNA, deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and calcium phosphate exposing compounds or compositions.

36. (NEW) The method according to claim 31, wherein the disease is an infectious disease.

37. (NEW) The method according to claim 31, wherein the disease is an acute or chronic inflammation, preferably inflammatory bowel disease, more preferably ulcerative colitis.

38. (NEW) The method according to claim 31, wherein the disease is cancer.

39. (NEW) The method according to claim 38, wherein the cancer is a cancer of the respiratory or alimentary tract.

40. (NEW) A method for identifying an agent possessing at least one accessible sulphate and/or at least one accessible phosphate group and/or regulating the effective amount of the said agent in a sample comprising incubating a sample with a polypeptide comprising the sequence of SEQ ID NO:1, or a functional derivative or fragment thereof, or of a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional derivative or fragment thereof.

41. (NEW) The method according to claim 40, wherein the identifying and/or regulating is carried out by using the at least one accessible sulphate and/or at least one accessible phosphate group.
42. (NEW) The method according to claim 40, wherein the identifying and/or regulating is carried out by varying the amount and/or the length of the polypeptide or of the nucleic acid.
43. (NEW) The method according to claim 40, wherein regulating the effective amount of an agent includes inactivating and/or capturing said agent.
44. (NEW) The method according to claim 40, wherein the agent comprises an agent being a microorganism.
45. (NEW) The method of claim 44, wherein said microorganism is a bacterium or a virus, the bacteria including the genera Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella and Bacillus.
46. (NEW) The method of claim 40, wherein said agent comprises an agent being a non-living compound or composition.

47. (NEW) The method of claim 46, wherein said non-living compound or composition is selected from the group consisting of DSS, sulphated carbohydrates, preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate, phosphate group exposing compounds or compositions, preferably DNA, deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and calcium phosphate exposing compounds or compositions.
48. (NEW) The method according to claim 40, wherein the sample is a biological, a food derived, a pharmaceutical or a cosmetic sample.
49. (NEW) A method for diagnosing the susceptibility of an individual to an agent which possesses at least one sulphate and/or at least one phosphate group, the method comprising detecting in a sample a polypeptide comprising the sequence of SEQ ID NO:1, a functional fragment or derivative thereof, or a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional fragment or derivative thereof, wherein a shortened polypeptide or a shortened nucleic acid as compared to the full-length polypeptide or nucleic acid is indicative of an increased susceptibility.
50. (NEW) The method according to claim 49, wherein the sample is a body fluid, preferably blood, saliva, semen or liquor, which is isolated from the individual.

51. (NEW) The method according to claim 49, wherein the agent comprises an agent being a microorganism.
52. (NEW) The method of claim 51, wherein said microorganism is a bacterium or a virus, the bacteria including the genera Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella and Bacillus.
53. (NEW) The method of claim 49, wherein said agent comprises an agent being a non-living compound or composition.
54. (NEW) The method of claim 53, wherein said non-living compound or composition is selected from the group consisting of DSS, sulphated carbohydrates, preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate, phosphate group exposing compounds or compositions, preferably DNA, deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and calcium phosphate exposing compounds or compositions.
55. (NEW) A method for determining in an individual the effective amount of a pharmaceutical comprising an agent which possesses at least one accessible sulphate and/or at least one accessible phosphate group, the method comprising detecting in a sample a polypeptide comprising the sequence of SEQ ID NO:1, a functional fragment or

derivative thereof, or a nucleic acid comprising the sequence of SEQ ID NO:2, or a functional fragment or derivative thereof,

wherein a shortened polypeptide or nucleic acid as compared to the full-length polypeptide or nucleic acid is indicative for a lower effective amount.

56. (NEW) The method of claim 55, wherein the sample is a body fluid, preferably blood, saliva, semen or liquor, which is isolated from the individual.

57. (NEW) The method according to claim 55, wherein the agent comprises an agent being a microorganism.

58. (NEW) The method of claim 57, wherein said microorganism is a bacterium or a virus, the bacteria including the genera Streptococcus, Staphylococcus, Escherichia, Helicobacter, Salmonella and Bacillus.

59. (NEW) The method of claim 55, wherein said agent comprises an agent being a non-living compound or composition.

60. (NEW) The method of claim 59, wherein said non-living compound or composition is selected from the group consisting of DSS, sulphated carbohydrates, preferably heparan sulphate, chondroitin sulphate, carrageenan, disodium sulphate, phosphate group

exposing compounds or compositions, preferably DNA, deoxynucleotides, surfactant phospholipids, sulphated mucins, sodium-, potassium- and calcium phosphate exposing compounds or compositions.

61. (NEW) A method of treating or preventing a disease caused by an agent possessing at least one accessible sulphate and/or at least one accessible phosphate group comprising administering to a patient in need thereof a therapeutically effective amount of at least one amino acid motif comprising 11 contiguous amino acids derived from a polypeptide comprising the sequence of SEQ ID NO:1, or of a nucleic acid encoding said amino acid motif.

62. (NEW) The method according to claim 61, wherein the 11 contiguous amino acids possess a sequence selected from the sequences GRVEVLYRGSW, GRVEILYRGSW and GRVEVLYQGWS.

63. (NEW) The use according to claim 62, wherein the 11 contiguous amino acids possess the sequence GRVEVLYRGSW.

64. (NEW) A method for binding an agent which possesses at least one accessible sulphate group and/or at least one accessible phosphate group, the method comprising contacting the agent with an amino acid motif comprising 11 contiguous amino acids derived from a polypeptide comprising the sequence of SEQ ID NO:1.

65. (NEW) The method according to claim 64, wherein the 11 contiguous amino acids possess a sequence selected from the sequences GRVEVLYRGSW, GRVEILYRGSW and GRVEVLYQGSW.

66. (NEW) The method according to claim 65, wherein the 11 contiguous amino acids possess the sequence GRVEVLYRGSW.